

**VANDENBERG AIR FORCE BASE  
INSTALLATION RESTORATION PROGRAM  
COMMUNITY ADVISORY BOARD  
ALLAN HANCOCK COLLEGE, LOMPOC CAMPUS**

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**14 NOVEMBER 2002**

Mr. Andrew Edwards called the Vandenberg Air Force Base (AFB) Community Advisory Board (CAB) meeting to order at 1000 hours. Mr. Edwards facilitated the meeting in Ms. Bea Kephart's absence. Ms. Kephart was TDY at Headquarters Space Command, Colorado Springs, CO. Col Cox, 30 CES, and Dr. Linda Fargo, co-chaired the meeting for Col Louis and Dr. Roger Welt, as they were unable to attend.

Mr. Edwards introduced Maj Peter Dettelis, the interim Environmental Flight Chief until a permanent Chief is selected due to the recent retirement of Lt Col Westfall. Mr. Edwards also welcomed the group of Cabrillo High School students who attended the last quarterly CAB meeting.

Mr. Edwards outlined the meeting's agenda:

- Installation Restoration Program Overview;
- Community Involvement Plan (CIP) Update;
- Site 60, Old GSA Gas Station;
- Site 20 UST, Landfill and Explosive Ordnance Disposal (EOD) Erosion Control Engineering Evaluation/Cost Assessment (EE/CA);
- Member Comments; and
- Site Tour.

*Installation Restoration Program Overview*

Mr. Edwards reported that Vandenberg is awaiting funds for fiscal year 2003. The total amount of funding expected is \$8.5M. IRP staff has obligated nearly \$2M in end of year funding to include additional funds for:

- Site 20 Source Reduction System;
- Site 27 Exploded Missile Silo remedial investigation/feasibility study;
- Site 33 Missile Silo 576E feasibility study; and
- FY03 compliance funds for the Area of Concern preliminary assessment/site investigation program.

Mr. Craig Nathe updated the CAB on the Ecological Risk Assessment (ERA) peer review panel's negotiations on toxicity reference values (TRVs). Mr. Nathe participated in a conference call the morning of the CAB with Department of Toxic Substances Control (DTSC), California Fish and Game, and contractors tasked to finalize TRVs not being reviewed by the expert panel. Presently, values have been determined for mammals; however, values for fish, birds, vertebrae, and plants are still under negotiation. The next meeting is scheduled for 27 November 2002, with one final meeting scheduled for 12 December 2002. The base is currently working with the State regulators to renegotiate the Federal Facility Site Remediation Agreement schedule.

### *Community Involvement Plan Update*

Mr. Ron MacLelland provided the 2002 CIP update. The CIP has been finalized and approved by DTSC. The plan has been submitted for Air Force review and approval. Final distribution of the CIP is estimated to be completed by 1 December 2002. Dr. Fargo requested that a copy of the final plan be made available for review at the next CAB meeting. Mr. MacLelland concurred, and offered to also provide electronic copies of the plan if preferred.

### *Site 60, Old GSA Gas Station*

Mr. Mark Miller, Shaw Group, briefed the CAB on IRP Site 60, located near Vandenberg AFB South Gate (Arguello, Monroe, and Sweeney Streets). Site 60, a former fueling station for GSA vehicles, was identified as having leaks from associated piping and pump islands during a site assessment. A total of four 10,000-gallon underground storage tanks (USTs) that stored leaded and unleaded gasoline and diesel fuel were located on this site. Due to fuel system leaks, the USTs were removed in 1995 along with fuel-impacted soil.

A remaining source area of contamination from the leaks is associated with dissolved methyl-tertiary-butyl-ether (MTBE) found in the groundwater. MTBE is a fuel additive that is used to reduce air emissions (e.g., smog), and it is very soluble in water. At Site 60, the shallow groundwater (6 to 8 feet) rises during the wet season mobilizing MTBE remaining in the soil.

The soluble MTBE tends to migrate faster in groundwater than any other contaminants. Vandenberg AFB and the California Regional Water Quality Control Board are concerned that MTBE will migrate to the Santa Ynez River and the Pacific Ocean. The base has partnered with the University of California at Davis and the University of Canada at Waterloo to implement an innovative approach to remediate contaminants at this site.

The remedial action includes installing a Permeable Reactive Barrier (PRB) and a Groundwater Circulation System (GCS). These systems use oxygen to enhance the natural biodegradation of MTBE by indigenous bacteria. The system performance will be monitored via upgradient and downgradient monitoring wells.

Mr. Miller showed the CAB several maps that displayed the PRB and GCS locations as well as the area where the contaminants have migrated. Flow charts and diagrams depicted the construction of the PRB system and the process of oxygen injection. The last flowchart showed a decline each month in the levels of contamination since the inception of this innovative technology project.

Mr. Miller continued his discussion of Site 60 during the actual site tour. CAB members had an opportunity to view the construction of the PRB and monitoring wells, and learn about the logistics of the system.

### *Site 20, Erosion Mitigation Project*

Mr. Andrew Edwards briefed the CAB on the Site 20 erosion mitigation project. Site 20 is located on north Vandenberg AFB approximately 600 feet southeast of Utah Avenue. Site 20 comprises three areas covering approximately 35 acres. Area 1 consists of USTs from an old filling station. Area 2 is a decommissioned Camp Cooke-era landfill, and Area 3 is a Camp Cooke drum disposal site and unexploded ordnance disposal (EOD) area.

In order to prevent erosion and the potential exposure of buried debris at this site, the base has identified several mitigation objectives: 1) decrease the storm water velocity in the Primary Ravine by installing seven storm water energy dissipaters; 2) repair the main culvert along Utah Ave; 3) divert storm water from the Secondary Ravine via connection to the existing culvert; and 4) clean up surface debris and dispose of ordnance and explosive related material encountered during excavation.

Mr. Edwards presented several photos that showed the site before and after work had been accomplished, as well as photos of ordnance, explosives, and debris that had been removed during excavation. Mr. Edwards continued his discussion of Site 20 and answered questions during the visit to the site.

#### *Member Comments*

Ms. Fargo welcomed the group of Cabrillo High School students who were in attendance. She also mentioned that many CAB members had an opportunity to see Site 20 before erosion repairs had been made, and was looking forward to the site tour to see the progress made at the site.

Col Cox reiterated Col Louis' recommendation from the last CAB meeting to possibly appoint a Cabrillo High School student as an honorary CAB member. Mr. MacLelland will review the CAB by-laws and provide a response at the next CAB meeting. Ms. Cathy Borgard, Cabrillo High School teacher expressed interest in becoming a CAB member to replace Mr. Ned Shores.

A field trip to Sites 20 and 60 were conducted after the meeting. Many CAB members attended the field trip as well as all of the Cabrillo High School students.

The next quarterly CAB meeting is tentatively scheduled for Thursday, 13 February 2003.